

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the above-referenced application.

Listing of Claims:

Claims 1 - 16 (Cancelled).

17. (Currently amended) A station for receiving a message from a first interconnected station on an input side and transmitting message information relating to the received message to a second interconnected station on an output side, comprising:

response means for returning a response to a request to receive and accept the message, the request being sent from the first interconnected station; and

congestion detection means, coupled to the response means, for detecting that congestion has occurred in the second interconnected station, wherein, when occurrence of congestion is detected by said congestion detection means, said response means conducts congestion control by delaying the response to the request to receive and accept said message from being transmitted to the first interconnected station for a prescribed delay time, wherein delaying transmission of the response to the first interconnected station by the prescribed delay time causes a reduction in message throughput received by the station on the input side from the first interconnected station.

18. (Previously presented) The station according to claim 17, wherein said prescribed delay time is a time obtained by dividing an average response time from the second interconnected station by a session number in the second interconnected station that is multiplied by a margin ratio.

19. (Previously presented) The station according to claim 17, wherein the congestion control is also conducted with switching means for switching said message information to another session when the occurrence of congestion is detected by said congestion detection means.

20. (Previously presented) The station according to claim 19, wherein when there are a plurality of interconnected stations on the output side and congestion has occurred or a closed state has been assumed in all the sessions to a specific interconnected station on the output side, said switching means distributes and sends said message information to other interconnected stations on the output side.

21. (Previously presented) The station according to claim 17, wherein said congestion detection means detects that congestion has occurred in the second interconnected station when an error indicating congestion is returned from the second interconnected station in response to a request to transfer said message information to the second interconnected station on the output side.

22. (Previously presented) The station according to claim 17, wherein said congestion detection means detects that congestion has occurred in the second interconnected station from a parameter representing a congested state in the response from the second interconnected station to a request to transfer said message information to the second interconnected station, the parameter being contained in said response.

23. (Previously presented) The station according to claim 17, wherein said congestion detection means detects that congestion has occurred in the second interconnected station when the average response time in a plurality of the latest responses has reached m times (where $m > 1$) of the average response time in the normal state, in the response from the second interconnected station to a request to transfer said message information to the second interconnected station.

24. (Previously presented) The station according to claim 17, further comprising:

issuance means for issuing a circuit state verification request with a prescribed period with respect to a session in the second interconnected station that is detected to be in a congested state by said congestion detection means, wherein said congestion detection means detects that a congested state in said session has been eliminated when an average response time in a plurality of the latest responses to the issued requests from said issuance means has become equal to or less than an average response time in a normal state.

25. (Currently amended) A station for receiving a message from a first interconnected station on an input side and transmitting message information relating to the received message to a second interconnected station on an output side, comprising:

response means for returning a response to a request to receive and accept the message, the request being sent from the first interconnected station; and

congestion detection means, coupled to the response means, which detects the occurrence of congestion in the station when the filling ratio in a buffer memory that stores said messages or received requests that have not been completely processed exceeds a prescribed filling ratio, wherein, when the occurrence of congestion in the station is detected by said congestion detection means, said response means conducts congestion control by delaying the response to the request to receive and accept said message from being transmitted to the first interconnected station, wherein delaying transmission of the response to the first interconnected station by the prescribed delay time causes a reduction in message throughput received by the station on the input side from the first interconnected station.

26. (Previously presented) The station according to claim 25, wherein said prescribed delay time is a time obtained by dividing an average response time from the second interconnected station by a session number in the second interconnected station that is multiplied by a margin ratio.

27. (Previously presented) The station according to claim 25, wherein the congestion control is also conducted with switching means for switching said message information to another session when the occurrence of congestion in the second interconnected station is detected by said congestion detection means.

28. (Previously presented) The station according to claim 27, wherein when there are a plurality of interconnected stations on the output side and congestion has occurred or a closed state has been assumed in all the sessions to a specific interconnected station on the output side, said switching means distributes and sends said message information to other interconnected stations on the output side.

29. (Previously presented) The station according to claim 25, wherein said congestion detection means detects that congestion has occurred in the second interconnected station when an error indicating congestion has been returned from the second interconnected station in response to a request to transfer said message information to the second interconnected station.

30. (Previously presented) The station according to claim 25, wherein said congestion detection means detects that congestion has occurred in the second interconnected station from a parameter representing a congested state in the response from the second interconnected station to a request to transfer said message information to the second interconnected station, the parameter being contained in said response.

31. (Previously presented) The station according to claim 25, wherein said congestion detection means detects that congestion has occurred in the second interconnected station when the average response time in a plurality of the latest responses has reached m times (where $m > 1$) of the average response time in the normal state, in the response from the second interconnected station to a request to transfer said message information to the second interconnected station.

32. (Previously presented) The station according to claim 25, further comprising:

issuance means for issuing a circuit state verification request with a prescribed period with respect to a session in the second interconnected station that is detected to be in a congested state by said congestion detection means, wherein said congestion detection means detects that the congested state in said session has been eliminated when an average response time in a plurality of the latest responses to the issued requests from said issuance means has become equal to or less than an average response time in a normal state.

33. (Previously presented) The station according to claim 25, wherein the message is one of a plurality of messages received from the first interconnected station, and wherein the response means responds to the request to receive and accept for each message.

34. (Previously presented) The station according to claim 17, wherein the message is one of a plurality of messages received from the first interconnected station, and wherein the response means responds to the request to receive and accept for each message.

35. (Currently amended) A station for receiving a message from a first interconnected station on an input side and transmitting message information relating to the received message to a second interconnected station on an output side, comprising:

a response unit that sends a response to a request to receive and accept the message, the request being sent from the first interconnected station; and

a congestion detector, coupled to the response unit, that detects whether congestion has occurred in the second interconnected station, wherein, when occurrence of congestion is detected by the congestion detector, the response unit conducts congestion control by delaying the response to the request to receive and accept the message from being transmitted to the first interconnected station for a prescribed delay time, wherein delaying transmission of the response to the first interconnected station by the prescribed delay time causes a reduction in message throughput received by the station on the input side from the first interconnected station.

36. (Previously presented) The station according to claim 35, wherein the prescribed delay time is a time obtained by dividing an average response time from the second interconnected station by a session number in the second interconnected station that is multiplied by a margin ratio.

37. (Previously presented) The station according to claim 35, further comprising:

a switch that switches the message information to another session when the occurrence of congestion is detected by the congestion detector.

38. (Previously presented) The station according to claim 37, wherein, when there are a plurality of interconnected stations on the output side and congestion has occurred or a closed state has been assumed in all the sessions to a specific interconnected station on the output side, the switch distributes and sends the message information to other interconnected stations on the output side.

39. (Previously presented) The station according to claim 35, wherein the congestion detector detects that congestion has occurred in the second interconnected station when at least one of:

an error indicating congestion is returned from the second interconnected station in response to a request to transfer the message information to the second interconnected station;

an average response time in a plurality of the latest responses has reached m times (where $m > 1$) the average response time in the normal state in responding to the request to transfer the message information to the second interconnected station; and

a parameter representing a congested state is included in a transfer response from the second interconnected station received in response to the request to transfer the message information to the second interconnected station.

40. (Previously presented) The station according to claim 35, further comprising:

a verification request issuer that issues a circuit state verification request with a prescribed period with respect to a session in the second interconnected station that is detected to be in a congested state by said congestion detector, wherein the congestion detector detects that a congested state in said session has been eliminated when the average response time in a plurality of the latest responses to the issued requests from the verification request issuer has become equal to or less than an average response time in a normal state.